



Fueling the Zoo Life



Olivia Tebben
Life/Physical Science
Iowa Falls-Alden High School
Blank Park Zoo

Overview of Business

Blank Park Zoo opened in 1966 as a children's zoo. The zoo is the only one in Iowa to be accredited by the Association of Zoos and Aquariums. The zoo's mission is to educate the public and participate in conservation while providing a positive experience for visitors throughout the entire year.

Job Specifics

Olivia worked with the large cat and primate zookeepers at the Blank Park Zoo this summer. Her responsibilities included animal husbandry, preparing primate diets, educating the public concerning conservation efforts and species-specific information, and training volunteers in cleaning and diet preparation..

Introduce the Problem

The zoo is anticipating the arrival of an adult female white-handed gibbon for the first time in zoo history. The zookeepers need your help to decide what they need to feed the gibbon.

In order to tackle this problem, you'll need to research the energy needs of the new gibbon. All organisms at the zoo, like humans, need specific amounts of carbohydrates, proteins, fats, cholesterol and fiber in order to stay healthy.

Background

- Energy flows from the organism being eaten (prey) to the organism eating it (predator). Energy does not disappear when an organism is eaten or dies.
- Certain amounts of macronutrients are necessary for organisms to survive (carbs, proteins, fats, etc.). You'll need to research how many grams of each food are needed.
- Zookeepers must simulate what an organism would eat in the wild in order to ensure the healthiest possible life at the zoo.

Business Solution

- Research what food the organism eats in the wild.
- Research how much of each macronutrient the organism needs.
- Research what grocery store foods might simulate those from the wild.
- Consult nutritionist and other zoos.

Student Solutions

Students should find that there is a difference between the calories consumed by an adult female and an adult male gibbon. In general, students should find that gibbons eat mostly fruits, vegetables, and their captive diets are enriched by "biscuits".